

Sarah L. Krein, Ph.D., R.N.
Research Assistant Professor in Internal Medicine
University of Michigan Medical School
Center for Clinical Management Research
Ann Arbor VA HSR&D Center of Excellence
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CURRICULUM VITAE

Education and Training

- 08/1985-04/1989 BSN (Bachelor of Science in Nursing, Suma Cum Laude),
University of Mary, Bismarck, ND
- 09/1991-06/1997 Ph.D. (Health Services Research, Policy and Administration),
University of Minnesota, Minneapolis, MN. Dissertation: Rural
hospitals and rural health clinics: The influence of market and
institutional forces. June 1997. Advisor: Jon C. Christianson, PhD

Certification and Licensure

Nursing Licensure

Registered Nurse, State of Michigan (#4704214499)
Expires 03/31/2010

Other Certification

BLS Certificate, Red Cross
Expires 11/18/2009

Academic, Administrative, and Clinical Appointments

- 07/1989-06/1991 Critical Care/Transplant Staff Nurse, St. Mary's Hospital,
Rochester, MN
- 09/1991-05/1992 Graduate Assistant, Division of Health Services Administration,
University of Minnesota, Minneapolis, MN
- 06/1992-09/1992 Research Assistant, "The Use of Psychotropic Drugs in Nursing
Homes," University of Minnesota, Institute for Health Service
Research, Minneapolis, MN

09/1992-09/1993	Research Assistant, “Diabetes PORT,” University of Minnesota, Institute for Health Services Research, Minneapolis, MN
09/1993-06/1997	Research Assistant, University of Minnesota Rural Health Research Center, Institute for Health Services Research, Minneapolis, MN
08/1997-present	Research Health Science Specialist, Research Investigator, VA Ann Arbor Health Services Research and Development Center of Excellence, VA Ann Arbor Healthcare System, Ann Arbor, MI
11/1998-06/2001	Adjunct Research Associate, Division of General Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, MI
06/2001-09/2006	Research Investigator, Division of General Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, MI
09/2006-08/2009	Research Assistant Professor, Division of General Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, MI
06/2007-present	Adjunct Research Assistant Professor, School of Nursing, University of Michigan, Ann Arbor, MI
09/2009-present	Research Associate Professor, Division of General Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, MI

Research Interests

1. Chronic Illness Care and Complex Chronic Disease
2. Chronic Pain
3. Organizational Behavior
4. Health Economics

Grants

Present and Active

5 P60 DK 20572 (W Herman) 12/01/02-11/30/13 (continuation)
NIH/NIDDK Total award \$8,900,000
Michigan Diabetes Research Training Center.
Role: Co-Investigator/Health Economist

1 R 18DK076622 (EA Kerr)	08/01/07-07/31/11
NIH/NIDDK	Total award \$2,179,092
Improving Adherence and Intensification of Medications Among Diabetes Patients	
Role: Co-Investigator/Health Economist	
1R01NR010700 (S Krein/S Saint)	07/01/08-04/30/12
NIH/NINR	Total award: \$1,714,114
Implementing Evidence to Prevent Urinary Infection and Enhance Patient Safety	
Role: Principal Investigator	
CSP 465-FS (R Hayward/S Krein)	06/01/08-05/31/13
VA Cooperative Studies Program	Total (Ann Arbor) award: \$1,876,733
VA Diabetes Trial Follow-up Study	
Role: Project Co-Principal Investigator/Health Economist	
DIB 98-001 (EA Kerr)	07/01/98-09/30/12
VA HSR&D	Total award \$1,750,000
Quality Enhancement Research Initiative – Diabetes Mellitus (QUERI DM)	
Role: Co-Investigator	
IIR 07-177 (S Krein/C Richardson)	10/01/08-09/30/11
VA HSR&D Merit Award	Total award: \$898,300
Veterans Walk to Beat Back Pain	
Role: Principal Investigator	
CHI 03-007 (P Vaitkevicius)	09/01/05-02/28/10
VA HSR&D Merit Award	Total award: \$845,990
Evaluation of a Cardiac Nurse Practitioner Palliative Care Program	
Role: Co-Investigator/Health Economist	
SDP 06-128 (M Heisler)	07/01/07-06/30/10
VA HSR&D	Total award \$829,100
Adherence and Intensification of Medications (AIM) Implementation Study	
Role: Co-Investigator/Health Economist	
SDP 06-003 (S Duffy)	10/01/06-09/30/09
VA HSR&D	Total award \$655,100
Inpatient Smoking Cessation: Bringing the Program to the Smoker	
Role: Co-investigator/Health Economist	
IIR 06-253 (S Vijan)	04/01/08-03/31/11
VA HSR&D Merit Award	Total award \$411,200
Improving Quality Measurement Using Quality-Adjusted Life-Years	
Role: Co-Investigator/Health Economist	

Pending Research Support

NIH RO1

Targeted Infection control Program (TIP) in Nursing Homes

Principal Investigator: L. Mody

07/01/09-06/30/14. Direct Costs (requested): \$ 325,000/yr

Role: Co-Investigator

VA Health Services Research and Development Merit Award

Managing Chronic Pain in Veterans with Substance Use Disorders

07/01/09-12/31/2012. Total Costs (requested): \$759,800

Role: Co-Investigator

VA Health Services Research and Development Merit Award

ASPIRE: Coaching Veterans to Healthy Weights and Wellness

Principal Investigator: J. Lowery and L. Damschroder

07/01/2009-06/30/2012. Total Costs (requested): \$917,100

Role: Co-Investigator/Health Economist

Previous Grants (partial list)

VA Health Services Research and Development Merit Award (IIR 97-077)

Proactive Diabetes Case Management

Principal Investigator: S. Krein (co-Principal Investigator: R. Hayward)

9/01/1998 – 8/31/2002

Role: Principal Investigator

VA Health Services Research and Development (TRH 01-031)

A Customfit Approach to Guideline Implementation

Principal Investigator: J. Lowery (Co-Principal Investigator: S. Krein)

7/01/2001 – 3/31/2003

Role: Co-Principal Investigator

VA Health Services Research and Development (SDR 01-019)

Translating Research Into Practice for Diabetes in the VA

Principal Investigator: R. Hayward & E. Kerr

3/01/2001 – 2/28/2004

Role: Co- Investigator

NIH/NIDDK R18 DK62323-01

Evaluating Nurse-Managed Collaborative Diabetes Care

Principal Investigator: B. Anderson

8/01/2002 – 7/31/2006

Role: Co-Investigator/Health Economist

VA Health Services Research and Development (DIT 02-064)

An Evaluation of a Coordinated Proactive Eye Care Program

Principal Investigator: R. Hayward & S. Bernstein
1/01/2004 – 12/31/2005
Role: Co-Investigator/Health Economist

VA Health Services Research and Development Merit Program (IIR 02-225).
Addressing Barriers to Translation for Treatment of Hypertension.
Principal Investigator: E. Kerr (Co-Principal Investigator: T. Hofer)
3/1/2004-2/28/2008. Total award \$1,256,563
Role: Co-Investigator

VA Rehab Research and Development Merit Program (E03-3362R)
Aerobic Performance, Mobility Limitations and Exercise in Older Adults With Diabetes
Principal Investigator: C. Blaum
5/01/2005 - 4/30/2008. Total award \$714,451
Role: Co-investigator/Health Economist

VA Cooperative Studies Program (CSP 465)
Glycemic Control and Complications in Diabetes Mellitus Type 2
Principal Investigator: R. Hayward (PI economic analysis subcontract)
7/01/00 – 6/30/2008
Role: Health Economist

VA Health Services Research and Development (RRP 07-354)
Study of Women Veterans In Menopause (SWIM)
Principal Investigator: S. Krein
10/01/2007 – 7/31/2008. Total award \$9,000
Role: Principal Investigator

VA Health Services Research and Development Merit Program (SAF 04-031)
Translating Infection Prevention Evidence to Enhance Patient Safety
Principal Investigator: S. Krein (Co-Principal Investigator: S. Saint)
10/01/2004 – 9/30/2008 (funding ended 3/31/08). Total award \$799,655
Role: Principal Investigator

VA Health Services Research and Development (SHP 08-138)
Assessing Nurse/Physician Communication in the ICU
Principal Investigator: S. Krein
4/1/2008 – 9/30/2008. Total award \$33,700
Role: Principal Investigator

VA Health Services Research and Development (SHP 08-176)
Summary Measures of Health Care Quality: A Critique of Four Approaches
Principal Investigator: J. Timbie (Co-Principal Investigator S. Vijan)
4/01/08 – 9/30/08. Total award \$15,800
Role: Co-Investigator

IIR 03-254 (D Aron) 04/01/05-03/31/09
VA HSR&D Merit Program Total award \$738,000
Diabetes Telemedicine Consultation: A Systems Improvement Intervention
Role: Co-investigator/Health Economist

Honors and Awards

1985-1989	Presidential Laureate Scholarship Recipient
1989	Sigma Theta Tau (nursing honor society)
1998	Special Contribution Award, Department of Veterans Affairs

Memberships in Professional Societies

1997-Present	AcademyHealth
2001-Present	International Health Economics Association (iHEA)
2005-Present	Association for Professionals in Infection Control and Epidemiology, Inc. (APIC)

Editorial Positions, Boards, and Peer Review Service

Study Sections

2004	Ad-hoc member of the Centers for Disease Control and Prevention Public Health Research Peer Review Panel
2004, 2005	Ad-hoc member of the VA HSR&D Scientific Merit Review Board
2005	Ad-hoc member of the Centers for Disease Control and Prevention Special Emphasis Panel (SEP) for Program Announcement Ci-5-006
2006	Ad-hoc member of the VA HSR&D General Health Services Scientific Merit Review Board
2007	Ad-hoc member of the VA HSR&D Health Services Methodology Scientific Merit Review Board
2009	Ad-hoc member of the Centers for Disease Control and Prevention Special Emphasis Panel (SEP) for Health Promotion and Disease Prevention Research Centers, DP09-001
2009	Stage 1 reviewer for National Institutes of Health Challenge Grants in Health and Science Research (RFA-09-003)

Reviewer

1996-2003	Journal of Rural Health
1999	Journal of the American Medical Association (JAMA)
2000	Health Services Research (HSR)
2002	Canadian Medical Association Journal
2003	Journal of the National Medical Association, Health Care Financing Review
2003-present	Diabetes Care

2003-present	Medical Care
2003-present	American Journal of Managed Care
2004	Archives of Internal Medicine
2006-present	Journal of General Internal Medicine
2006-present	Implementation Science
2007-present	Infection Control and Hospital Epidemiology
2008-present	American Journal of Infection Control
2008-present	The Journal of Pain

Teaching

09/1993-12/1993	Teaching Assistant, University of Minnesota, Institute for Health Services Research
1997-present	Presenter and Seminar Participant, University of Michigan General Medicine Weekly Research Conference (present 1 conference per year)
1997-present	Presenter and Seminar Participant, Ann Arbor VA Center of Excellence Research Conference (present 1 conference every 1-2 years)
2001-2002	Mentor: Michele Heisler, MD, MPA, University of Michigan Robert Wood Johnson Clinical Scholar and Lecturer, University of Michigan Department of Medicine on use of multi-level modeling techniques
2005-2006	Co-Mentor: Jennifer Hefner, pre-doctoral student, University of Michigan School of Public Health
2006	Seminar: "Frameworks for Understanding and Implementing Quality Improvement Interventions: An Organizational Perspective." University of Michigan Robert Wood Johnson Foundation Clinical Scholars Program. March 2006 and December 2006
2005-2006	Mentor: John Hollingsworth, MD, Department of Urology, University of Michigan Medical School on quantitative methods for practicum
2006-2007	Mentor: Crista Johnson, MD, University of Michigan Robert Wood Johnson Clinical Scholar and Lecturer, Obstetrics & Gynecology, University of Michigan Medical School on quantitative methods

2007 -present	Mentor: Pat Rouen, PhD candidate, University of Michigan School of Nursing
2007	Seminar: “Understanding and Implementing Quality Improvement Interventions in Healthcare Organizations.” University of Michigan Robert Wood Johnson Foundation Clinical Scholars Program. November 2007
2008	Seminar: “Understanding and Implementing Quality Improvement Interventions in Healthcare Organizations.” University of Michigan Robert Wood Johnson Foundation Clinical Scholars Program. November 2008

Committee, Organizational, and Volunteer Service

Institutional

1998 – present	Co-director Diabetes QUERI Research Coordinating Center
2000 – 2004	VA-University of Michigan-Trinity Health Evidence-Based Practice Conference Planning Committee
2007 – present	VA Ann Arbor Research and Development Committee member

Regional

2000 – present	National Kidney Foundation of Michigan Community Health Initiatives Advisory Committee
2001 – present	VA VISN 11 Care Management Committee
2002 – 2004	Michigan Department of Community Health, Diabetes Prevention and Control Program, Strategic Planning Task Force/Steering Committee
2004 – 2007	Michigan Department of Community Health, Diabetes Partners in Action Coalition Board of Directors

National

1998 – present	Quality Enhancement Research Initiative – Diabetes Mellitus (diabetes QUERI) Executive Committee, Veterans Health Administration
2002	VA Health Care Atlas Steering Committee
2006 – present	Quality Enhancement Research Initiative – Stroke Executive Committee Member, Veterans Health Administration
2006 – present	VA Health Economics Resource Center, Steering Committee member
2008 – 2009	2009 VA HSR&D National Meeting Planning Committee, Workshops co-chair

Visiting Professorships, Seminars, and Extramural Invited Presentations

Extramural Invited Presentations

“QUERI-DM: A Clinical/Research Partnership to Enhance Diabetes Care for Veterans.”

Invited presentation, VA Diabetes Educators Specialty Practice Group, Orlando, FL, August 16, 1999.

“QUERI: Translating Research into Practice.” Invited presentation, VA Diabetes Educators Specialty Practice Group, San Diego, CA, August 8, 2000.

“Proactive Diabetes Case Management: Translating Research into Practice.” Invited presentation, Evidence-Based Practice 2001 – Clinical Relevance and Practice Realities, Ann Arbor, MI, March 23, 2001.

“Diabetes Care Management: Example VA Ann Arbor Healthcare System.” Invited presentation, VA Diabetes Educators Specialty Practice Group, Louisville, KY, August 13, 2001.

“Use of Electronic Medical Record Data and Automated Clinical Databases For System-wide Quality Improvement” Invited presentation as part of panel session on Informatics Strategies to Support Evidenced-based Practice at the Information Technology Conference/ Office of Information, Austin, TX, August 6, 2003.

“Measuring Outcomes of a Case Management Program”. Invited presentation, VISN 11 Primary Care Case Management Conference, Kalamazoo, MI, November 4, 2004.

“Step by Step through the QUERI Process: Improving Diabetes Eye Care.” Invited presentation as part of panel session on Lessons Learned from VA Implementation Research. AcademyHealth 2005 Annual Research Meeting, Boston, MA, June 27, 2005.

“Moving Evidence from the Journals to the Patient’s Bedside: Translating Infection Prevention Evidence to Enhance Patient Safety (TRIP).” Invited presentation at the Michigan Society for Infection control (MSIC) Spring Conference, Lansing, MI, April 20, 2006.

“Translating Infection Prevention Research into Practice.” Invited presentation, Plenary session, The University of Maryland School of Nursing and the VA Maryland Health Care System 6th Annual Evidence-based Practice Conference, Baltimore, MD, April 2, 2009.

“Behavioral Health Research and the Returning Veteran Population: challenges and Opportunities.” Invited presentation at the Academy of Behavioral Medicine Research 2009 Annual Conference, Keystone, CO, June 20, 2009.

Other Presentations

"The Employment and Use of Nurse Practitioners and Physician Assistants By Rural Hospitals," Paper presented at the National Rural Health Association Conference, Minneapolis, MN, May 1996.

“Rural Hospitals and Rural Health Clinics,” Poster presentation at the National Rural Health Association Conference, Seattle, WA, May 1997.

“VHA’s Quality Enhancement Research Initiative for Diabetes Mellitus (QUERI-DM),” Poster presented at the 1st Annual National VA Diabetes Symposium, Washington, D.C., March 1999.

“Michigan Diabetes Outreach Networks (MDONs): Evaluating the Impact on Care Process and Patient Outcomes,” Paper presented at the CDC Diabetes Translation Conference, Albuquerque, NM, April 1999.

“Michigan Diabetes Outreach Networks (MDONs): A Public Health Approach to Improve Diabetes Care and Outcomes,” Poster presented at the Association for Health Services Research 16th annual meeting, Chicago, IL, June 27, 1999.

“Examining Variation at Provider, Team and Facility Level for Performance Indicators Related to Diabetes Care,” Oral presentation at the HSR&D Service 18th Annual Meeting, Washington, D.C., March 23, 2000.

“Aspirin Use and Counseling About Aspirin Among Patients With Diabetes in VA” Krein SL, Kerr EA, Smith DM, Hogan MM, Hayward RA. Poster presented at the HSR&D Service 19th Annual Meeting, Washington, D.C., February, 15-16, 2001.

“Proactive Diabetes Case Management: Expectation Versus Reality” Krein SL, Klamerus ML, Vijan S, Pawlow A, Reeves P, Hayward, RA. Poster presented at the HSR&D Service 20th Annual Meeting, Washington, D.C., February, 14-15, 2002.

“Case Management: Is it Meeting Expectations?” Krein SL, Klamerus ML, Vijan S, Lee J, Fitzgerald T, Hayward, RA. Poster presented at the Academy for Health Services Research and Policy Annual Research Meeting, Washington, D.C., June, 25, 2002.

“Chronic Pain and Self-management Among Veterans with Diabetes.” Krein SL, Heisler M, Piette JD, Makki F, Kerr EA. Poster presented at the VA HSR&D Service 22nd Annual Meeting, Washington, D.C., March 10, 2004.

“Does Self-Efficacy Mediate the Influence of Chronic Pain on Patients’ Self-Care Adherence?” Krein SL, Heisler M, Piette JD, Butchart A, Kerr EA. Poster presented at the VA HSR&D Service National Meeting, Arlington, VA, February 16, 2006.

“Adoption of Infection Prevention Practices by VA and non-VA Hospitals.” Krein SL, Hofer T, Kowalski C, Saint S. Poster presented at the VA HSR&D Service National Meeting, Arlington, VA, February 16, 2006.

“Adoption of Device-Related Infection Prevention Practices by U.S. Hospitals.” Krein, SL, Hofer T, Kowalski C, Banaszak-Holl J, Saint S. Poster presented at the AcademyHealth 2006 Annual Research Meeting, Seattle, WA, June 26, 2006.

“How QUERI Process Facilitates Collaboration: Focusing on Chronic Pain.” Krein, S. and Ullrich, P. VA HSR&D QUERI Cyberseminar, May 3, 2007

“What Practices Are U. S. Hospitals Using to Prevent Hospital-Acquired Urinary Tract Infection and Why? A Mixed-Methods Study.” Saint S, Kowalski C, Krein S. Poster presented at the VA HSR&D Service National Meeting, Baltimore, MD, February 14, 2008.

“Preventing Ventilator-Associated Pneumonia in U. S. Hospitals: A Mixed-Methods Study.” Krein SL, Kowalski C, Kaufman S, Forman J, Damschroder L, Saint, S. Oral presentation at the 18th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America (SHEA), Orlando, FL, April 7, 2008.

“More Than a Pain in the Neck: How Discussing Chronic Pain Affects Medication Intensification for Hypertension.” Krein SL, Hofer TP, Holleman R, Piette JD, Standiford CJ, Klamerus ML, Kerr EA. Poster presented at VA QUERI National Meeting, Phoenix, AZ, December 11, 2008.

“The Role of Champions in Implementing Infection Prevention Practices.” Damschroder LJ, Banaszak-Holl J, Kowalski C, Forman J, Saint S, Krein SL. Poster presentation at 2nd Annual NIH Conference on the Science of Dissemination and Implementation: Building Research Capacity to Bridge the Gap From Science to Service, Bethesda, MD, January 28, 2009.

“Diffusion of Innovation: Translating Infection Prevention Research Into Practice.” Sarah L. Krein and Sanjay Saint. Invited lecture, University of Michigan, Interdisciplinary Committee on Organizational Studies (ICOS), Ann Arbor, MI, March 27, 2009.

“Exercise and Management of Chronic Back Pain.” Invited presentation VHA Pain Management Teleconference, May 5, 2009.

Bibliography

Peer-Reviewed Journals and Publications

1. Yawn B, Wellever A, Hartley D, Casey M, Krein SL, Moscovice I. Availability of rural Minnesota obstetric services: Is it a problem? The Journal of Rural Health 1995; 11(3):192-203.
2. Krein SL. The employment and use of nurse practitioners and physician assistants by rural hospitals. The Journal of Rural Health 1997; 13(1):45-58.
3. Krein SL, Christianson JC, Chen M. The composition of rural hospital medical staffs: The

- influence of hospital neighbors. The Journal of Rural Health 1997; 13(4):306-319.
4. Yawn B, Krein SL. Rural enrollment in MinnesotaCare. Minnesota Medicine 1997; 80(4):42-49.
 5. Yawn B, Krein SL, Christianson J, Hartley D, Moscovice, I. Rural radiology: Who is producing images and who is reading them? The Journal of Rural Health 1997; 13(2): 136-144.
 6. Moscovice I, Casey M, Krein SL. Rural managed care: Patterns and prospects. Health Affairs 1998; 17(1):172-179.
 7. Krein SL, Casey M. Research on managed care organizations in rural communities. The Journal of Rural Health 1998; 14(3):180-199.
 8. Christianson J, Krein SL. NorthMed HMO. The Journal of Rural Health 1998; 14(3): 233-243.
 9. Krein SL. The adoption of provider-based rural health clinics by rural hospitals: A study of market and institutional forces. Health Services Research 1999; 34(1):33-60.
 10. Krein SL, Hayward RA, Pogach L, BootsMiller BJ. Department of Veterans Affairs Quality Enhancement Research Initiative for Diabetes Mellitus. Medical Care 2000; 38(6): I38-I48.
 11. Krein SL, Klamerus M. Michigan diabetes outreach networks: a public health approach to strengthening diabetes care. Journal of Community Health 2000; 24(6):495-511.
 12. Kerr EA, Krein SL, Vijan S, Hofer TP, Hayward RA. Avoiding pitfalls in chronic disease quality measurement: A case for the next generation of technical quality measures. The American Journal of Managed Care 2001; 7(11):1033-1043.
 13. Krein SL, Hofer TP, Kerr EA, Hayward RA. Whom should we profile? Examining diabetes care practice variation among primary care provider, provider teams and healthcare facilities. Health Services Research 2002; 37(5):1159-1180.
 14. Krein SL, Vijan S, Pogach LM, Hogan MM, Kerr EA. Aspirin use and counseling about aspirin among patients with diabetes. Diabetes Care 2002; 24(6):965-970.
 15. Kerr EA, Smith DM, Hogan MH, Krein SL, Pogach L, Hofer TP, Hayward RA. Comparing diabetes quality measures derived from different data sources. Joint Commission Journal on Quality Improvement 2002; 28(10):555-565.

16. Heisler M, Smith DM, Hayward RA, Krein SL, Kerr EA. How well do patients' own assessments of their diabetes self-management correlate with actual glycemic control and receipt of recommended diabetes services? Diabetes Care 2003; 26(3):738-743.
17. Heisler M, Smith DM, Hayward RA, Krein SL, Kerr EA. Racial disparities in diabetes care processes, outcomes, and treatment intensity. Medical Care 2003; 41(11):1221-1232.
18. Kerr EA, Smith DM, Hogan MH, Hofer TP, Krein SL, Bermann M, Hayward RA. Building a better quality measure: Are some patients with "poor quality" actually getting good quality care? Medical Care 2003; 41(10):1173-1182.
19. Hayward RA, Hofer TP, Kerr EA, Krein SL. Quality improvement initiatives: issues in moving from diabetes guidelines to policy. Diabetes Care 2004; 27(S2):B54-B60.
20. Krein SL, Klamerus ML, Vijan S, Lee JL, Fitzgerald JT, Pawlow A, Reeves P Hayward, RA. Case management for patients with poorly controlled diabetes: A randomized trial. American Journal of Medicine 2004; 116(11):732-739.
21. Kerr EA, Gerzoff RB, Krein SL, Selby JV, Piette JD, Curb JD, Herman WH, Marrero DG, Narayan KM, Safford V, Mangione CM. A Comparison of Diabetes Care Quality in Veterans Affairs and Commercial Managed Health Care Systems: Results from the TRIAD Study. Annals of Internal Medicine 2004; 141(4):272-281.
22. Krein SL, Heisler M, Piette JD, Makki F, Kerr EA. The effect of chronic pain on diabetes patient's self-management. Diabetes Care 2005; 28(1):65-70.
23. Jackson GL, Yano EM, Edelman D, Krein SL, Ibrahim MA, Carey TS, Lee SYD, Hartmann, KE, Dudley T K, Weinberger M. (2005). Veterans affairs primary care organizational characteristics associated with better diabetes control. American Journal of Managed Care 2005; 11(4):225-237.
24. Choe HM, Mitrovich S, Dubay D, Hayward RA, Krein SL, Vijan S. Proactive case management of high-risk patients with type 2 diabetes by a clinical pharmacist. American Journal of Managed Care 2005; 11(4):253-260.
25. Piette JD, Heisler M, Krein SL, Kerr EA. The Role of Physician Trust as a Buffer Against Medication Non-Adherence Due to Cost Pressures. Archives of Internal Medicine 2005; 165: 1749-1755.
26. Krein SL, Olmsted RN, Hofer TP, Kowalski C, Forman J, Banaszak-Holl J, Saint S. Translating infection prevention evidence into practice using quantitative and qualitative research. AJIC: American Journal of Infection Control 2006; 34(8): 507-512.

27. Krein SL, Bingham CR, McCarthy JF, Mitchinson A, Payes J, Valenstein M. Diabetes treatment among VA patients with comorbid serious mental illness. Psychiatric Services 2006; 57(7):1016-1021.
28. Johnston MV, Pogach L, Rajan M, Mitchinson A, Krein SL, Bonacker K, Reiber G. Personal and treatment factors associated with foot self-care among veterans with diabetes. J Rehab Research and Development 2006; 43(2):227-238.
29. Kim C, Kerr EA, Bernstein S, Krein SL. Gender disparities in lipid management: the presence of disparities depends on the quality measure. American Journal of Managed Care 2006; 12:133-136.
30. Olmsted RN, Kowalski CP, Krein SL, Saint S. Reading habits of infection control coordinators in the United States: peer-reviewed or non peer-reviewed evidence? AJIC: American Journal of Infection Control 2006; 34:616-620.
31. Krein SL, Funnell MM, Piette JD. Economics of Diabetes. Nursing Clinics of North America 2006; 41:499-511.
32. Madigan M, Smith-Wheelock L, Krein SL. Healthy hair starts with a healthy body: using hair stylists as lay health advisors to prevent chronic kidney disease in eight Michigan cities. Preventing Chronic Disease 2007; 4(3):A64. Also available from: http://www.cdc.gov/pcd/issues/2007/jul/06_0078.htm
33. Kupersmith J, Francis J, Kerr EA, Krein SL, Pogach L, Kolodner RM, Perlin JB. Advancing Evidence-Based Care in Diabetes through Health Information Technology: Lessons from the Veterans Health Administration. Health Affairs 2007; 26:W156-W168.
34. Krein SL, Heisler M, Piette JD, Butchart A, Kerr EA. Overcoming the Influence of Chronic Pain on Older Patients' Difficulty With Recommended Self-Management Activities. The Gerontologist 2007; 47(1):61-68.
35. Hollingsworth JM, Hollenbeck BK, Englesbe M, DeMonner S, Krein SL. Operative mortality after renal transplantation: does surgeon type matter? The Journal of Urology 2007; 177:2255-2259.
36. Krein SL, Hofer TP, Kowalski C, Olmsted RN, Kauffman CA, Forman J, Banaszak-Holl J, Saint S. Use of Central Venous Catheter-Related Bloodstream Infection Prevention Practices by US Hospitals. Mayo Clinic Proceedings 2007; 82(6):672-678.
37. Hollingsworth JM, Krein SL, Miller DC, DeMonner S, Hollenbeck BK. Payer leverage and hospital compliance with a benchmark: A population-based observational study. BMC Health Services Research 2007; 7:112.

38. Kerr EA, Heisler M, Krein SL, Kabeto M, Langa KM, Weir D, Piette JD. Beyond Comorbidity Counts: How Do Comorbidity Type and Severity Influence Diabetes Patients' Treatment Priorities and Self-Management? Journal of General Internal Medicine 2007; 22(12):1635-1640.
39. Green LA, Wyszewianski L, Lowery JC, Kowalski CP, Krein SL. An Observational study of the effectiveness of practice guideline implementation strategies examined according to physicians' cognitive styles. Implementation Science 2007; 2(1):41.
40. Saint S, Kowalski CP, Kaufman SR, Hofer TP, Kauffman CA, Olmsted RN, Forman J, Banaszak-Holl J, Damschroder L, Krein SL. Preventing Hospital-Acquired Urinary Tract Infection in the United States: A National Study. Clinical Infectious Diseases 2008; 46:243-240. PMID: Not Required.
41. Krein SL, Bernstein SJ, Fletcher CE, Makki F, Goldzweig CL, Watts B, Vijan S, Hayward RA. QUERI Series: Improving eye care for veterans with diabetes: an example of using the QUERI steps to move from evidence to implementation. Implementation Science 2008; 3:18. PMID: PMC2277434.
42. Hollingsworth JM, Krein SL, Dunn RL, Wolf JS, Hollenbeck BK. Understanding Variation in the Adoption of a New Technology in Surgery. Medical Care 2008; 46(4):366-371. PMID: Not Required.
43. Mitchinson AR, Kerr EA, Krein SL. Management of Chronic Non-Cancer Pain by VA Primary Care Providers: When Is Pain Control a Priority? American Journal of Managed Care 2008; 14:77-84. PMID: Not Required.
44. Saint S, Kowalski CP, Forman J, Damschroder L, Hofer TP, Kaufman SR, Creswell JW, Krein SL. A multicenter qualitative study on preventing hospital acquired urinary tract infection in US Hospitals. Infection Control and Hospital Epidemiology 2008; 29:333-341. PMID: Not Required.
45. Forman J, Creswell JW, Damschroder L, Kowalski CP, Krein SL. Qualitative Research Methods: Key Features and Insights Gained by Use in Infection Prevention Research. American Journal of Infection Control 2008; 36:764-771. PMID: Not Required.
46. Krein SL, Kowalski, CP, Damschroder L, Forman J, Kaufman SR, Saint S. Preventing Ventilator-Associated Pneumonia in the United States: A Multi-Center Mixed-Methods Study. Infection Control and Hospital Epidemiology 2008; 29:933-940. PMID: Not Required.
47. Mody L, Saint S, Kaufman SR, Kowalski CP, Krein SL. The Adoption of Alcohol-Based Handrub by U.S. Hospitals: A National Survey. Infection Control and Hospital Epidemiology 2008; 29:1177-1180. PMID: PMC2666622.

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